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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/830,398	07/19/2001	Milivoj Vujic	P24.870-USA	7782

7590                    08/21/2003

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[REDACTED] EXAMINER

CHANG, VICTOR S

ART UNIT	PAPER NUMBER
1771	

DATE MAILED: 08/21/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/830,398	VUJIC, MILIVOJ
	<b>Examiner</b>	<b>Art Unit</b>
	Victor S Chang	1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM  
 THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 08 July 2003.
- 2a) This action is **FINAL**.                  2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-4,14-17,19,20,24-26 and 30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-4,14-17,19,20,24-26 and 30 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) The proposed drawing correction filed on \_\_\_\_\_ is: a) approved b) disapproved by the Examiner.  
 If approved, corrected drawings are required in reply to this Office action.
- 12) The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
 \* See the attached detailed Office action for a list of the certified copies not received.
- 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
 a) The translation of the foreign language provisional application has been received.
- 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                  | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

1. The Examiner has carefully considered Applicant's amendments and remarks filed on July 8, 2003. Applicant's cancellation of claims 18, 21-23 and 27-29, amendments to claims 1 and 19, and newly added claim 30 have all been entered.
2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim Rejections - 35 USC § 112***

3. Claims 1-4, 14-17, 19, 20, 24-26 and 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

For claims 16 and 24-26, with respect to Applicant's argument that "the scope of the difference between the first and second insulation materials is expressly recited" (Response, page 13), the Examiner repeats that the term "different" appears vague and indefinite as to the scope of the difference, and suggests that "substantially different" may be appropriate, if proper support exists.

Additionally, in newly amended claim 1, line 16, and claim 19, line 2, the phrase "contraction/expansion joint" appears vague, indefinite and confusing. While applicant can act as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, it appears that the "contraction/expansion joints" 370, 334 and 335 in Fig. 1 of the instantly claimed invention (see Specification, page 10) are

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"spacers" filling in a gap or recess along the length of an insulator module, or at the end face of an insulator module. As such, for the purpose of this Office action, it is presumed that the phrase "contraction/expansion joint" is equivalent to spacers.

### ***Response to Amendment***

4. Claims 1-4, 14-17, 19, 20, 24-26 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kikuchi (US 4287245) either individually, or in view of GB 2296749 for claims 14-15 and 17, substantially for the reasons set forth in section 5 of Paper No. 13, together with the following additional observations.

It is noted that newly amended claim 1 now recites that the insulation module has at least one contraction/expansion joint formed along the length of the module.

With respect to Applicant's Response arguing that "it would not be obvious to position a gap, recess or any other type of contraction/expansion joint along an insulating module ... because the module is intended to provide continuous covering of the item being insulated" (Response, page 9), the Examiner reiterates (see section 11 of Paper No. 10) that forming a gap intermittently along the length to accommodate spacers which responds to contraction/expansion due to temperature changes is old and well known. Note also as evidence of the state of the art Maybee (US 3557840). In Fig. 5, Maybee shows that in order to provide for expansion and contraction of an insulated pipe 34, elastic spacers 38 may be included. These elastic spacers may be constructed of any suitable material such as sponge rubber or plastic. Other conventional expansion takeup materials may also be employed, and the elastic

spacers 38 may be covered (column 5, lines 10-20). Furthermore, it is also well known art that annular spacers are generally placed along a pipe to be insulated at suitable intervals with their diameter less than the outer diameter of the insulator module, as evidenced in Fig. 2 of Frye (US 5565652). As such, it would have been obvious to one of ordinary skill in the art to modify Kikuchi's heat insulator with the elastic spacers of Maybee, motivated by the desire to accommodate the dimensional expansion and contraction due to temperature changes.

With respect to Applicant's argument that Kikuchi "teaches away from the use of contraction/expansion joints" (Response, pages 9-10), the Examiner notes that Kikuchi addresses the problem in the joint portions between the insulator modules, rather than the structure of the elastic spacers by taught Maybee, Applicant's argument to the contrary notwithstanding.

With respect to newly amended claim 19, the Examiner notes that both Maybee and Frye teach the spacers having a diameter smaller than the outer insulation layer as set forth above.

For new added claim 30, it is believed that a plurality of spacers at suitable intervals along the insulator module is either inherently disclosed by Maybee, or an obvious modification to one skill in the art of pipe insulator jacket, motivated by the desire to relief the stress caused by the thermal expansion/contraction. Further, it is also old and conventional to joint the end faces of insulator modules together with elastic annular spacer, as evidenced by the state of the art FR 2295336A (Abstract).

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5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor S Chang whose telephone number is 703-605-4296. The examiner can normally be reached on 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel H Morris can be reached on 703-308-2414. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

VSC

DANIEL ZIRKER  
PRIMARY EXAMINER  
GROUP 1300-

1700

*Daniel Zirker*